AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-7. (Canceled)

8. (Previously Presented) A method for delivering blood from a heart chamber containing blood to a target vessel of a patient's vascular system, the method comprising steps of:

a) placing a conduit having a lumen in fluid communication with a heart chamber containing blood;

b) placing the conduit in fluid communication with the lumen of a target vessel and securing the conduit to the target vessel;

c) delivering blood from the heart chamber into the conduit during at least one phase of the heart cycle; and

d) permitting the blood to flow from the conduit into the lumen of the target vessel in more than one direction.

9. (Previously Presented) The method of claim 8, wherein a portion of the conduit extending between the heart chamber and the target vessel is disposed on an exterior of the patient's heart.

10. (Previously Presented) The method of claim 8, wherein the conduit is generally T-shaped and includes a first portion having one free end and a second portion having two free ends, and step (a) is performed by placing the first conduit

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1300 I Street, NW
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202.408.4000
Fax 202.408.4400
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portion through the myocardium and at least partially within the heart chamber while step (b) is performed by placing the second conduit portion at least partially within the lumen of the target vessel.

11. (Previously Presented) The method of claim 10, wherein the first conduit portion is formed of a material having sufficient rigidity to avoid collapsing during myocardial contraction when placed according to step (a).

12. (Previously Presented) The method of claim 11, wherein step (a) is performed prior to step (b), and step (b) is performed by securing the second conduit portion to the target vessel via a substantially suture-free attachment.

13. (Previously Presented) The method of claim 11, wherein the second conduit portion is passed through a wall of the target vessel and placed at least partially within the lumen of the target vessel without collapsing the second leg of the conduit, and blood flows within the lumen of the target vessel in two opposite directions.

14. (Previously Presented) The method of claim 11, wherein the target vessel has a lumen that is at least partially obstructed by an occlusion, and the plurality of directions include toward and away from the occlusion.

15. (Previously Presented) A method for delivering blood from a heart chamber containing blood to a target vessel of a patient's vascular system, the method

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Fax 202.408.4400
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comprising steps of:

a) placing a conduit having a lumen in fluid communication with a heart chamber containing blood;

b) placing the conduit in fluid communication with the lumen of a target vessel and securing the conduit to the target vessel;

c) delivering blood from the heart chamber into the conduit during at least one phase of the heart cycle; and

d) permitting blood to flow out of the conduit unrestricted in more than one direction in the lumen of the target vessel.

16. (Previously Presented) The method of claim 15, wherein the conduit is disposed along the exterior of the heart.

17. (Previously Presented) The method of claim 15, wherein the heart chamber contains oxygenated blood and the target vessel is a coronary artery.

18. (Previously Presented) The method of claim 17, wherein the heart chamber is the left ventricle, and blood flows from the heart chamber into the conduit and into the target vessel during both phases of the heart cycle.

19. (Previously Presented) A method for placing a target vessel of a patient's coronary vascular system in fluid communication with a heart chamber containing blood, the method comprising steps of:

a) providing a conduit including first and second portions that are disposed

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transverse to each other and have lumens in fluid communication, the first conduit portion including at least one inlet and the second conduit portion including at least one outlet;

b) placing the inlet of the first conduit portion in fluid communication with a heart chamber containing blood to allow blood to enter the lumen of the first conduit portion;

c) positioning the outlet of the second conduit portion in fluid communication with the lumen of a target vessel at a selected location in the target vessel to allow blood to flow into the lumen of the target vessel from the second conduit portion; and

d) securing the second conduit portion to the target vessel at the selected location while substantially not moving the second conduit portion along a longitudinal axis of the target vessel.

20. (Previously Presented) The method of claim 19, wherein the conduit is disposed along an exterior of the patient's heart.

21. (Previously Presented) The method of claim 19, wherein the second conduit portion of the conduit is secured to the target vessel via a substantially suture-free, end-to-side attachment.

22. (Previously Presented) A method for deploying a conduit to deliver blood from a heart chamber to a target vessel of a patient's coronary vascular system, the method comprising steps of:

a) providing a conduit including first and second portions each of which has a lumen, wherein the first and second conduit portions are disposed transverse to each

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other with the lumens in fluid communication and the second conduit portion is at least partially collapsible;

b) placing the lumen of the first conduit portion in fluid communication with a heart chamber containing blood;

c) at least partially collapsing the second conduit portion and positioning the second conduit portion at least partially within the lumen of a target vessel at a selected location in the target vessel; and

d) expanding the second conduit portion within the lumen of the target vessel at the selected location to secure the second conduit portion to the target vessel in fluid communication therewith.

23. (Previously Presented) A method for delivering blood from a heart chamber containing blood to a target vessel of a patient's vascular system by placing conduit in the myocardium, the method comprising steps of:

a) determining a thickness of the patient's myocardium adjacent a heart chamber containing blood;

b) placing a conduit having a lumen in the myocardium with the lumen of the conduit in fluid communication with the heart chamber containing blood;

c) placing the conduit in fluid communication with the lumen of a target vessel and securing the conduit to the target vessel; and

d) delivering blood from the heart chamber into the conduit and allowing blood to exit the conduit and enter the target vessel in more than one direction.

24. (Previously Presented) A device for placing a target vessel of a patient's vascular system in fluid communication with a heart chamber containing blood, the

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1300 I Street, NW
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202.408.4000
Fax 202.408.4400
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device comprising:

conduit including first and second portions, wherein the first and second conduit portions each have an axis and a lumen through which blood may flow, the axes of the first and second conduit portions being transverse to each other;

wherein the first conduit portion is configured to be placed in fluid communication with a heart chamber containing blood and includes at least one inlet configured to be at least partially positioned in myocardial tissue without collapsing during myocardial contraction;

wherein the second conduit portion is configured to be at least partially positioned within the target vessel and includes at least one outlet adapted to deliver blood to the lumen of the target vessel; and

wherein the inlet of the first conduit portion is more rigid than the outlet of the second conduit portion.

25. (Previously Presented) The device of claim 24, wherein the first conduit portion is at least partially formed of a rigid, non-compliant material, and the second conduit portion is at least partially formed of a compliant material.

26. (Previously Presented) The device of claim 25, wherein the first conduit portion comprises a rigid, metallic member and the second conduit portion comprises a graft vessel.

27. (Previously Presented) The device of claim 26, wherein the graft vessel is joined to the metallic member and comprises a synthetic vascular graft material.

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28. (Previously Presented) The device of claim 24, further comprising a reinforcing member that extends at least partially along the conduit and provides at least the second conduit portion and the outlet with a desired amount of rigidity.

29. (Previously Presented) The device of claim 24, wherein the axes of the first and second conduit portions are generally perpendicular such that the conduit is substantially T-shaped, and the first conduit portion corresponds to a first leg of the T having one free end while the second conduit portion corresponds to a second leg of the T having two free ends.

30. (Previously Presented) The device of claim 29, wherein the second conduit portion is configured such that the outlet may be disposed and secured within the lumen of the target vessel without contacting the entire circumference of the inner vessel wall.

31. (Previously Presented) The device of claim 29, wherein at least one of the two free ends of the second conduit portion is expandable in at least one of an axial direction and a radial direction.

32. (Previously Presented) The device of claim 24, wherein the first and second conduit portions meet at a junction that is less rigid than the first or second conduit portion.

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33. (Previously Presented) A device for placing a target vessel of a patient's vascular system in fluid communication with a heart chamber containing blood, the device comprising:

a conduit having first and second portions each having a lumen, wherein the first and second conduit portions are disposed transverse to each other with the lumens in fluid communication;

wherein the first conduit portion has a longitudinal axis and is sized and configured to be placed in fluid communication with a heart chamber containing blood;

wherein the second conduit portion has a longitudinal axis and is sized and configured to be placed at least partially within a target vessel in a patient's vascular system to deliver blood to the target vessel, the second conduit portion including first and second ends adapted to be positioned in the target vessel; and

wherein the longitudinal axis of the first conduit portion crosses the longitudinal axis of the second conduit portion at a location that is spaced different distances from the first and second ends of the second conduit portion.

34. (Previously Presented) The method of claim 33, wherein the second conduit portion is provided with a selected amount of rigidity so as to be self-supporting yet compliant when in an expanded orientation, while being at least partially deformable to a collapsed orientation for introduction into the lumen of the target vessel.

35. (Previously Presented) The device of claim 34, wherein the first and second conduit portions meet at a junction, the first conduit portion being more rigid than the second conduit portion.

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36. (Previously Presented) The device of claim 33, wherein the first conduit portion comprises a rigid member configured to be positioned in myocardial tissue.

37. (Previously Presented) The device of claim 33, wherein the second conduit portion includes a reinforcing member disposed adjacent one of the first and second free ends.

38. (Previously Presented) The device of claim 33, wherein the second conduit portion has first and second blood outlets.

39. (Previously Presented) The device of claim 38, wherein the longitudinal axis of the first conduit portion crosses the longitudinal axis of the second conduit portion at a location that is spaced different distances from the first and second blood outlets of the second conduit portion.

40. (Previously Presented) The device of claim 33, wherein the conduit is generally T-shaped and the first conduit portion corresponds to one leg of the T having one end while the second conduit portion corresponds to another leg of the T having two ends, and wherein the two ends of the other leg of the T define the first and second blood outlets and are spaced different distances from the one leg of the T.

41. (Previously Presented) A device for placing a target vessel of a patient's

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vascular system in fluid communication with a heart chamber containing blood by forming a blood flow path between the target vessel and the heart chamber, the device comprising:

a conduit having first and second portions each of which has an axis, the axes of the first and second conduit portions being transverse to each other;

wherein the first conduit portion has a free end and is configured to be placed in fluid communication with a heart chamber containing blood, and the second conduit portion has two free ends that are sized and configured to be positioned at least partially within the lumen of a target vessel in the patient's vascular system; and

wherein the conduit is formed at least in part of a molded thermoset material having a predetermined amount of flexibility to permit the second portion of the conduit to be flexed for placement within the lumen of a target vessel.

42. (Previously Presented) The device of claim 41, wherein the first conduit includes a member configured to be placed in myocardial tissue without collapsing during myocardial contraction.

43. (Previously Presented) The device of claim 42, wherein the conduit is generally T-shaped and the first conduit portion corresponds to one leg of the T having one free end while the second conduit portion corresponds to another leg of the T having two free ends, and wherein the two free ends of the other leg of the T define first and second outlets adapted to be placed in fluid communication with the lumen of the target vessel.

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44. (Previously Presented) The device of claim 43, wherein the second conduit portion conduit is configured such that the outlets may be disposed and secured within the lumen of the target vessel without the second conduit portion contacting the entire circumference of the inner vessel wall.

45. (Previously Presented) The device of claim 43, wherein at least one of the two free ends of the other leg of the T is expandable in a radial direction.

46. (New) A device for delivering a conduit into the wall of a patient's heart to place the conduit in communication with a heart chamber, the device comprising:

a support member having a length, a proximal end and a distal end;

a conduit supported by the support member;

a sheath overlying at least a portion of the conduit, the sheath being movable to selectively expose the portion of the conduit covered by the sheath; and

wherein the sheath is moved to expose said portion of the conduit upon positioning the support member and conduit at a desired location within the wall of the heart.

47. (New) The device of claim 46, wherein the support member comprises a hollow member that removably receives a dilator for forming an opening in the heart wall.

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48. (New) The device of claim 46, wherein the conduit comprises a tubular member, and the sheath comprises a sleeve overlying the conduit.

49. (New) The device of claim 48, wherein the conduit has two open ends and a plurality of openings disposed between the two ends.

50. (New) The device of claim 46, wherein the conduit comprises an expandable tubular element and the sheath comprises a retractable sleeve that overlies the tubular element.

51. (New) The device of claim 50, wherein the expandable tubular element comprises a stent and the support member comprises a shaft on which the stent is mounted.

52. (New) A method for placing a conduit in the wall of a patient's heart, the method comprising steps of:

(a) providing a support member and a conduit;

(b) passing the support member and the conduit through a wall of a coronary vessel and through the wall of a patient's heart;

(c) positioning the conduit within the wall of the heart; and

(d) removing the support member from the wall of the heart.

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53. (New) The method of claim 52, wherein a sheath overlies the conduit, and further comprising the step of moving the sheath to expose the conduit once the shaft and conduit are positioned in the wall of the heart.

54. (New) The method of claim 53, wherein the conduit is expandable and further comprising the step of expanding the conduit within the wall of the heart.

55. (New) The method of claim 52, wherein step (b) is carried out by first forming an opening extending at least partially through the wall of the heart and then passing the support member through the opening.

56. (New) The method of claim 52, wherein the conduit is passed through a wall of a coronary vessel and through the wall of the heart into a heart chamber containing oxygenated blood, and the conduit is positioned so as to place the heart chamber in communication with the interior of the coronary vessel.

57. (New) The method of claim 55, wherein the coronary vessel is a coronary artery and the heart chamber is the left ventricle.

58. (New) The method of claim 56, further comprising positioning a support member within the coronary vessel to support the wall of the vessel during at least steps (b) and (c).

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59. (New) The method of claim 56, wherein the support member is positioned within the coronary vessel while carrying out steps (b) and (c) and then is removed from the vessel.

60. (New) A method for placing and expanding a conduit in the wall of a patient's heart, the method comprising steps of:

(a) providing a support member and a conduit, the conduit being supported in a collapsed orientation and movable to an expanded orientation;

(b) placing the support member and the conduit in a wall of a patient's heart;

(c) positioning the conduit within the wall of the heart;

(d) expanding the conduit to the expanded orientation; and

(e) removing the support member and leaving the conduit in the wall of the heart.

61. (New) The method of claim 60, wherein the conduit is passed through a wall of a coronary vessel and through the wall of the heart into a heart chamber containing oxygenated blood, the conduit placing the heart chamber in communication with the interior of the coronary vessel.

62. (New) The method of claim 61, wherein the coronary vessel is a coronary artery and the heart chamber is the left ventricle.

63. (New) The method of claim 61, wherein the conduit is positioned in the wall of the heart so that one end of the conduit extends partially into the heart chamber.

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64. (New) A device for forming a channel that extends at least partially through the wall of a patient's heart and communicates with a heart chamber, the device comprising:

a shaft having a length, a proximal end and a distal end; and

a tissue removal mechanism movably supported on the shaft so as to be movable along the length of the shaft, the tissue removal mechanism including a tissue-removing portion that is actuated to remove a section of tissue from a patient's heart to form a channel that extends at least partially through the heart wall and communicates with a heart chamber; wherein the tissue removal mechanism is moved along at least a portion of the length of the shaft into contact with the section of heart tissue and is actuated to remove the section of tissue.

65. (New) The device of claim 64, wherein the tissue-removing mechanism comprises a coring tool slidably mounted on the shaft.

66. (New) The device of claim 65, wherein the tissue-removing mechanism is moved along a portion of the length of the shaft to contact the section of tissue and then is rotated with respect to the shaft to cut the section of tissue from the heart wall.

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67. (New) A method for forming a channel that extends through the wall of a patient's heart to communicate a coronary vessel with a heart chamber, the method comprising:

placing a shaft through an outer wall of a coronary vessel and into an interior lumen of the vessel, the shaft having a portion configured to remove tissue from the heart wall;

placing the shaft through an inner wall of the coronary vessel and placing said portion of the shaft in contact with the heart wall; and

using the shaft to remove tissue from the heart wall to form a channel that extends through the heart wall and communicates the coronary vessel with a heart chamber.

68. (New) The method of claim 67, wherein said portion of the shaft has a tissue-removing mechanism comprising a coring tool.

69. (New) The method of claim 68, wherein the coring tool is rotated to cut the section of tissue from the heart wall.

70. (New) A method for introducing a medical device through a coronary vessel and the wall of a patient's heart to perform a medical procedure, the method comprising steps of:

positioning a guide member through a coronary vessel and the wall of a patient's heart into a heart chamber;

providing a medical device configured to carry out a medical procedure on the heart; and

using the guide member to introduce the medical device into the heart wall.

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